Sulfur Sampling and Analysis

Gerald Gentleman Station

3/31/16

Sulfur content of the coal burned at Gerald Gentleman Station (GGS) is determined and reported monthly to EIA as a monthly average for coal from each mine. GGS does not have an "as fired" sampling system to determine constituent content of the coal as it is burned on a real time basis. Therefore, the data reported to EIA is a monthly average of the coal fuel "as received". The sampled sulfur content of each train received during a given month from every coal mine is weighted and averaged to produce the monthly average that is reported to EIA.

Each coal fuel contract that GGS has includes a provision for sampling and analysis (typical language attached). The contract provisions require each mine to complete a sample and analysis for each coal train that GGS receives from that mine to be sampled and tested in accordance with ASTM Standards. Coal sampling at the mines is done on a continuously cut sample off the coal stream that loads the silos that load the trains and is not a grab sample. The sample stream is then sampled for analysis in a manner that yields a representative sample according to ASTM D2234 / D2234M-10.

Mines use different labs for sample analysis. A commonly used lab, SGS for example, uses method D4239 (combustion method A) to determine sulfur content.